

# DEVELOPMENT OF CAPITAL MARKET IN BANGLADESH :

Some Lessons from Japanese Experience\*

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In the wake of liberation of Bangladesh, there was hasty and wholesale nationalization, particularly of every important sector of industry, without any preparedness and without considering whether there would be necessary modicum of know-how, expertise and personnel available. Thus 85% of capacities and 70% of fixed investment was placed in the nationalized sector under 11 sector corporations.<sup>1)</sup> Accordingly, the private sector's share in the fixed investment of modern industrial sector came down from 64% to only about 10%.<sup>2)</sup> In terms of the number of units, however, the private sector still remained predominant. Nearly 90% of the registered factories numbering over 3 thousand was in the private sector.<sup>3)</sup> They were, of course, mostly of small scale. Besides, there was a large number of small scale and cottage industrial units in private hands which was not registered.

The most fundamental implication of nationalization of industries for private capitalism in Bangladesh was its virtual elimination from large scale industrial ownership. However, most of these nationalized industries suffered losses subsequently. Some enterprises borrowed from financial institutions and failed to repay their loans and interest thereon. Others received subsidy to meet their current expenditures. A number of important actions have been purported to improve the performance of the public sector concerns. These actions, to sum up, have included a reorganization of public sector corporations and units thereunder, allowing increased flexibility in pricing, capital restructuring, and improved system for monitoring of performance, but with no tangible improvement of this sector. All these result in giving the private sector a

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1) Government of the People's Republic of Bangladesh, Planning Commission, The First Five Year Plan, 1973-78, p. 26.

2) Ahmed, Q. Khaliquzzaman, "The Manufacturing Sector of Bangladesh-An Overview", The Bangladesh Development Studies, Autumn 1978, p. 390.

3) Ibid., p. 407.

major role to play. Consequently, public sector enterprises are being transferred to private sector as an unpreventive measure.

The process of industrial growth through private sector requires the development of a capital market that will provide an adequate and properly distributed supply of finance to the entrepreneurs who are setting up new industries or expanding ones. Capital market makes investible funds available to the most prospective and profitable companies which compete for share and debenture issues. Traditionally, public issues by the private companies are small both in Bangladesh and Japan.<sup>1)</sup> It is believed by many scholars and policy-makers that the Japanese experience in the post-Meiji Restoration period is relevant and usefull in the context of Bangladesh.<sup>2)</sup> Government of Bnagladesh is trying to develop the capital market through different policy measures and tax concessions. Even the rate of development is not upto expectation. Thus the situation warrants detailed examination of the capital market development in Bangladesh and Japan and finding out any relevancy between these two market. This study is a modest attempt towards that end.

## I . INSTITUTIONAL FRAMEWORK

In developing economies state plays a pioneering role, a promotional role and also a stimulating role for promoting private sector enterprises. Thus institutions are established with the specific purpose to pioneer industries, to subscribe shares and debentures, to guarantee and grant long-term loans, to underwrite issues or to help in filling the ' gap ' in some other way may be called special financial institutions or Development Finance Institutions (DFI). French Credit Mobiler eatablished in 1852 may be said to be the pioneer in the field. The Industrial Bank of Japan was established in 1902 and many more institutions were established after the First World War. Shortage of funds in the capital market, technical knowledge and inadequate facilities for industries and investors indicate the great need of such institutions in Bangladesh.

Comprising three layers the financial system of Bangladesh has been designed in such a way that different types of banks specialize in different types of lending. The layers consist of a) the regulatory authorities, b) public finance and c) private finance. At the top of the system the Bangladesh Bank (Central Bank of Bangladesh), Controller of Capital Issues (CCI), now Securities and Exchange Commission (SEC) and the Ministry of Finance form the key regula-

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1 ) Ahmed, M. Farid, Japanese Way of Financing Industries : Its Applicability to a Developing Country, Bangladesh, Unpublished Master Thesis, Yokohama National University, Japan, March 1985.

2 ) Farouk, A., Economic Development of Bangladesh : Some Lessons from Meiji Japan, Research Monograph, Bureau of Business Research, Dhaka University, 1974, p. 1.

tory authorities. Government financial institutions is mostly owned and controlled by Government. These include Bangladesh Krishi Bank (Bangladesh Agricultural Bank), Grameen Bank (Village Bank), Rajshahi Krishi Bank (Rajshahi Agricultural Bank), Bangladesh Shilpa Bank (Bangladesh Industrial Development Bank), Bangladesh Shilpa Rin Sangstha (Bangladesh Industrial Credit Corporation), Investment Corporation of Bangladesh (ICB), Post Office Savings Scheme and 3 Nationalized Commercial Banks. As regards private finance, the financial institutions so far developed are in the category of commercial banks, some life and general insurance companies. In this category there are two Islamic Banks based on the principle of profit sharing instead of traditional charging of interest on deposits. Besides, a stock exchange called Dhaka Stock Exchange (DSE) has been functioning as a market for securities.

The capital market of Bangladesh broadly is divided into two segments, e. g., the non-security segment and the securities segment. Nonsecurity segment is comprised of the two development finance institutions Bangladesh Shilpa Bank (BSB) and Bangladesh Shilpa Rin Sangstha (BSRS) and the securities segment is comprised of the Dhaka Stock Exchange (DSE), ICB and its co-underwriters, e. g., BSB, BSRS, Sonali Bank, Janata Bank, Agrani Bank, Rupali Bank, Pubali Bank, Uttara Bank and Shadaran Bima Corporation (General Insurance Corporation). BSB and BSRS provide long-term and medium-term loans to entrepreneurs while ICB and its co-underwriters provide equity finance either through direct underwriting or through bridge finance. Short-term finance is mainly provided by the commercial banks. Industries in Bangladesh rely heavily on bank fund. These financial institutions play dominant role in the industrialization process of the country. Of the total industrial credit of Tk. 920 million provided for capacity creation in the year 1984–85, 86% was given by BSB, BSRS and ICB whereas the remaining 14% was provided by nationalized commercial banks. Out of this 86%, BSB provided 62% and BSRS provided 18%.<sup>1)</sup>

The main philosophy behind setting up of the financial institutions was to ensure optimum development of the industrial sector through providing financial support. There was a time when loan sanction and loan disbursement were the main criteria for evaluating the performance of these institutions. But now, the recovery of disbursed loans has become an important element of their performance evaluation.

Lower recovery of loan is at present a great problem faced by these financial institutions. BSB has recovered only 19% of its overdues and 37% of its current dues whereas BSRS has recovered only 8% of the overdue amount.<sup>2)</sup> The overdue loan of BSB stands at Tk. 3225.9

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1) Alamgir, Mohiuddin Khan, "Development Banks in Bangladesh", Annual Conference of Bangladesh Economic Association, Jahangir Nagar University, Dhaka, 1985, p. 1.

2) Report of the Sub-Committee for Industrial Finance, Ministry of Industries, Government of Bangladesh, September 1985.

million or 39.6% of total loan amounting to Tk. 8146.4 million on 30th June 1990. The overdue loan was 49% on 30th June 1989. The overdue loan of BSRS stands at Tk. 4432.1 million or 51.7% of total loan on 30th June 1990. The same figure was 78.6% on 30th June 1989.<sup>1)</sup> There is some evidence of concern amongst the aid donors who have made a significant financial contribution to sustain the lending programs of these institutions.

Bangladeshi commercial banks hold a relatively modest amount of non-Government investments. An examination of the statements of the individual banks reveals very small holdings of shares. In general such holdings generally amounted to less than 1% of total deposits.<sup>2)</sup> The internal policy of the banks clearly does not favor the acquisition of securities of companies in the private sector. This attitude represents a combination of factors including a reluctance to hold longterm investments in the face of short term obligations, the modest amount of securities available, lack of their liquidity and lack of confidence in stock market of Bangladesh. Even granted these factors, however, this virtual abstinence is extreme. The commercial banks of Bangladesh, as in most less developed countries, are so dominant in the nation's financial structure that their help in the creation of a securities market becomes very important. There is reason to believe that banks are not performing their due role in this regard.

In the immediate future, the institutions involved in bringing supply and demand together are ICB and the Dhaka Stock Exchange. ICB functions both as a development finance company and as an underwriter. It performs the former role when it provides either bridge or debenture financing to new companies. In this capacity, it competes with the two much larger development banks—BSB and BSRS—already in the field. It also performs underwriting function. In this capacity, it provides investment banking functions that is essential for the securities market.

ICB is primarily engaged in the provision of venture capital and hence not immediately involved in recovering payments against their investments. But still the Corporation's dues / overdues in respect of interest on bridge loan, debenture loan and debenture principal stood at Tk. 1064.3 million.<sup>3)</sup>

When a company either public or private wants to raise funds through issue of shares or debentures, it approaches the capital market by advertisement in daily newspapers or financial journals or through broker or underwriter. But a proper consent must be taken from the Controller of Capital Issues (CCI), now Securities and Exchange Commission (SEC), before any

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1) Bangladesh Bank, Annual Report, 1989–90, p. 63.

2) Robbins, Sidney M., A Securities Market Development Program in Bangladesh, International Finance Corporation (unpublished report), 1980, p. 90.

3) Government of Bangladesh, Ministry of Finance, Resume of the Activities of the Financial Institutions in Bangladesh, 1988–89, p. 157.

public offer. In Bangladesh, capital issues have been controlled under Capital Issues (Continuance of Control) Act 1947. All issues of shares, bonds, debentures and other instruments creating a charge (or lien) on the assets of the company are governed by this Act. Till recently all issues above Tk. 0.5 million for public companies and above Tk. 2.0 million for private companies required the consent of SEC but now exemption limit has been increased to Tk. 2.0 million and Tk. 5.0 million respectively due to increase in capital cost. The control on capital issues was imposed with a view to make best use of capital which is short in supply. The activities of the DSE and all industrial investment in the country are governed by the Capital Issue (Continuance of Control) Act of 1947 which was first formulated by the British during World War II to channelize investment into war related industries. However, this has created some problems for the entrepreneurs and needs to be amended to suit the current needs of the investors. When a company wants to issue capital it has to apply to the SEC in a prescribed form giving details of requirements, underwriting arrangements and nature of industry etc. Usually when a company has been granted permission to expand or start a new industry by the Government, consent is given without much difficulty though in certain cases amount is reduced. But controversies are there as regards bonus issues and right issues. It is reported that many application for bonus issues have been kept in suspense for long time. Strict conditions have been laid down with regard to the ratio of bonus shares to capital and reserves etc. Similarly, there has been difficulty with regard to right issue. Companies have not been allowed to issue right shares on their own terms. Consequently, there is a feeling among the industrialists that capital issue control should be relaxed.

It is observed that investors are against any control on bonus issues, because it does not involve any diversion of funds from any source. It is only conversion of reserves into shares and so does not serve any purpose. However, control on other issues may be continued because capital is still scarce factor of production in Bangladesh. Even controversies surrounding control of capital remains because industry requires capital only for those projects which have been approved by the Ministry of Industries.

The Capital Issue (Continuance of Control) Act of 1947 requires that the prospectus or other documents offering the security for sale must contain a statement that this consent has been obtained from the Government which, however, "does not take any responsibility for the financial soundness of any scheme or for the correctness of any of the statements made or opinion expressed with regard to them." Most companies still have to solve financing, production and operating problem after having obtained necessary permission.

## II. STOCK MARKET DEVELOPMENT IN BANGLADESH

Throughout the world the stock exchanges are considered as the unparallel institution for mobilization of savings and capital of the society and also a very sensitive barometer of business activity. In Bangladesh, Dhaka Stock Exchange (DSE) is now considered as the nerve center of the economic activity. Before independence of Pakistan in 1947 only two stock exchanges were functioning in the areas of the then Pakistan. Both of these exchanges stopped functioning soon after 1947 due to large scale migration of the non-Muslim members to India.<sup>1)</sup> Subsequently, one stock exchange was established at Karachi in 1948 and another in the then East Pakistan in 1954. However, after liberation, the socialization program in Bangladesh drastically curtailed the scope of exchange operation. Most of the companies listed with DSE were either nationalized or declared abandoned. Thus the operation of DSE come to stand still. In the middle of 1976, DSE resumed its operation following some pragmatic measures initiated by the Government of the People's Republic of Bangladesh. The historical development of DSE has been presented in Table— I in a summarized form.

Tabel— I  
Historical Development of DSE  
— in chronological order —

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1954	First established in the name of East Pakistan Stock Exchange Association Ltd.
1956	Formal trading started at Narayangonj.
1958	Shifted to Dhaka at Narayangonj Chamber Building.
1959	Shifted to own building at 9F Motijheel C / A
1962	Renamed as East Pakistan Stock Exchange Ltd.
1964	Became Dhaka Stock Exchange Ltd. (DSE).
1971	Suspended trading activities.
1976	Resumed trading activities with 9 companies.

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### Demand and Supply Condition of Securities

In the context of Bangladesh securities market the major weaknesses lie in low supply and demand condition of securities which, in turn, indicates less inclination of companies from raising equity, insufficient institutional support, lack of investors' confidence and so on. The savers, the issuers and the financial intermediaries are the parties essentially contributing

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1) Meenai, S. A., Money and Banking in Pakistan, Karachi : 1966, p. 131.

directly to these weaknesses. All these groups are yet to attain the stage of take-off.

Savers : The savers are the suppliers of funds and constitute the demand side of the securities market. The savers in Bangladesh surrounded with shortcomings. The important shortcomings are outlined below :

i ) The savers are not conscious about different vehicles of investment and the securities market as a whole. All classes of investors tend to relate the return on a stock to its dividend payment, thereby usually overlooking the possibility of capital gains.<sup>1)</sup> The notion of modern portfolio management based on the link between risk and return has gained headway in developed securities market but not familiar to the investors of Bangladesh.

ii ) Individual savings particularly after independence have accrued mostly in the hands of those persons who may be termed financially unsophisticated and inexperienced. These people are apathetic towards advanced form of financial wealth holding. High socio-political and economic instability in the country significantly contribute to the preference for hoarding money, precious stones, gold, real estate etc. instead of long-term investment in risky financial assets.<sup>2)</sup>

iii ) The confidence of the savers has been shaken as far as securities market is concerned due to loss of their investment resulting from nationalization of industries after independence.

iv ) Acquiring the ownership of well diversified portfolios is possible by those who have sufficiently large income. The number of wealthy persons who can allocate a large part of their money income for investing in shares, debentures or other form of securities which is required for sustaining a corporate securities market is quite low.<sup>3)</sup>

Issuers : This group covers the companies that issue securities. They constitute the supply side of the securities market and the situation is not good either. It is necessary to have a wide range and adequate number of securities in the market to meet the diversified choice of investors. The security market in Bangladesh provides a limited number of securities. The poor condition of the securities market may be better reflected from the comparison of market capitalization of securities in relation to Gross National Products (GNP). The proportion of market capitalization of GNP in Bangladesh as on 31st December 1989 was only 2.5% as compared to , 9% in India, 55% in Malaysia, 64% in Singapore and an average of 20% in the Newly Industrialized Countries (NICs). The market capitalization is 145% of GNP in Japan and 118

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1 ) Robbins, S. M., op. cit., p. xiii.

2 ) Khan, H. R. and Howlader, S. R., "Bangladesh Securities Market—Challenges and Prospects", The Dhaka University Studies, Part-C, December 1984, p. 131.

3 ) Khan, H. R. and Howlader, S. R., Ibid.

% of GNP in Hongkong.<sup>1)</sup> The important factors that contribute to the poor condition of the supply side of Bangladeshi securities market are pointed out below :

i ) The companies in Bangladesh tend not to raise equity capital which is non inflationary investment financing as it is otherwise available more conveniently and at relatively lower cost through the financial institutions. There were 1981 public limited companies registered with the office of Registrar of Joint Stock Companies on June 30, 1988 but only 100 of them were then listed with the DSE.<sup>2)</sup>

ii ) Various individuals and family groups inclined to concentrate ownership and control within themselves which appears to be one of the fundamental constraints to the growth of capital market. There were 16057 private limited companies representing primarily family-owned enterprises on 30th June 1988 most of them want to confine their holdings to their family members and relatives. It is also reported that even when the company is listed on the stock exchange, few shares are available for trading as majority remain held by the original sponsors. The original sponsors often buy additional shares in the market to raise their holdings to as high as 70% or 80% though shares are floated in the primary market on 50 : 50 basis.<sup>3)</sup>

iii ) Security market in Bangladesh is lacking many good securities due to nationalization of the enterprises. These securities would otherwise be made available in the market.

iv ) The multinational companies constitute some of the largest and probably the best operated companies in Bangladesh. These are either owned by Government or foreign investors resulting in non-availability of these stocks in the market although they are listed with the stock exchange.

v ) Many of the newly emerging enterprises are faced with multifarious problems, e. g., lack of internal market, unfair competition from black market products, shortage of working capital etc. causing these securities less attractive.

vi ) The issuers of the companies are represented by entrepreneurs most of whom are still in the process of transition from trade and other profession to industries. Consequently, the entrepreneurial ability of the average sponsors has not yet been able to attain standard of optimum efficiency.

vii ) There is lack of information about the company's financial position and future prospects. It is gathered that even the yearly financial statements are not submitted by the companies to the stock exchange regularly.

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1 ) Unpublished Report of the Committee Constituted by Government to Suggest Remedies for Improvement of the Stock Market from Its Present Bearish Condition, 1990, p. 9.

2 ) Alam, K., "Developing Capital Market", The Bangladesh Observer, dated 21-10-1989.

3 ) Alam, K., Ibid.



viii) It is often alleged that the listed companies do not feel the responsibility for timely allotment of shares or refund of investor's money (in case of oversubscription) relating to any new public offering or for timely disbursement of dividend.<sup>1)</sup> Inordinate delays in these matters caused substantial amount of financial loss to the investors due to scarcity value of money. This discourages the investors in general.

ix) The degree of risk for underwriting securities may vary from company to company. Accordingly, the rates of underwriting commission vary with risks anticipated. But Capital Issues (Exemption) Ordinance 1967 limits the underwriting commission to 2.5%. Consequently high risk companies find it difficult to get underwriter at this rate.

x) There are many securities which are not listed with the DSE competing with securities listed there. Among them Unit Certificates of ICB, Pratirakha Sanchaya Patra, Bonus Sanchaya Patra, Wage Earners Development Bond and National Bonds are important ones to absorb a sizeable investible fund. Had these bonds been floated through the securities market, the depth and breadth of the market would have been much better.

Financial Intermediaries : This group refers to the investment banks, commercial banks, insurance companies and the like. In the developed countries financial intermediaries are major buyers and sellers of securities. Reflecting at least in part, the underdeveloped condition of the securities market, the institutional investors in Bangladesh have been minor participants. The important problems they are facing are :

i) In Bangladesh, the recycling of fund could not be paced with optimum inertia resulting from inactive primary market. This has caused liquidity constraints for both special financial institutions and commercial banks.

ii) Bangladeshi commercial banks are unwilling to hold non-government securities. An examination of the statements of the individual banks reveals very small holdings of shares. As noted earlier such holdings generally amounted to less than 1% of total deposits. This attitude of banks although represents some practical problems, still questionable.

iii) There are at least 20 Insurance Companies in Bangladesh (2 in the public sector and 18 in the private sector). According to Section 2(3) of Insurance Act 1938 "approved securities" for investment means Government securities and any other security charged on the revenue of the Government or guaranteed fully as regards principal and interest by Government. This Act does not include listed securities and thereby prohibiting this fund to enter into stock market.

iv) A sizeable investible fund is available in different Provident Funds, Pension Funds

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1) Kashem, H. A., "Pujir Bazare Noirajya" (Indiscipline in Capital Market), Bichitra, a Bengali National Weekly, dated 26-7-1985, p. 32.

and Trust Funds. Section 20 of the Trust Act 1882 provides that these funds can be invested in securities “fully and unconditionally guaranteed by Government.” Besides, according to Section 54(b) of the Cooperative Societies Ordinance 1984, Cooperative Societies can only invest in the similar type of securities as specified in the Trust Act. As a result, these funds can not participate in the stock market.

v) Except ICB there is no reserve quota of new issues for institutional investors. Since most securities are oversubscribed in the recent past in Bangladesh the applying institutions are either not allotted any amount or were allotted the minimum amount of Tk. 500 or Tk. 1000 as determined by lottery. This discourages the institutions to apply for new issues.

#### Market Capitalization of Listed Stocks

Market capitalization of listed stocks is calculated by multiplying the closing price of

Table— II  
Growth Pattern of Listed Securities  
(Figures in million)

Year	No. of securities enlisted	No. of Shares and Debentures	Paid up Capital		Market Capitalization	
			Total Taka	% Increase	Total Taka	% Increase
1976	9	13.61	137.52	—	146.72	—
77	11	14.65	230.50	67.61	248.49	69.36
78	14	18.45	281.33	22.05	305.38	22.90
79	18	21.23	365.10	29.77	393.73	28.93
80	23	22.23	405.88	11.17	436.86	10.95
81	26	26.65	528.13	30.12	603.23	38.08
82	29	32.42	725.55	37.38	811.56	34.54
83	44	44.37	1,001.54	38.04	1,211.26	49.25
84	58	62.35	1,546.57	54.42	2,256.47	86.29
85	72	86.45	2,059.68	33.18	3,492.64	54.78
86	82	99.59	2,653.05	28.81	5,730.62	64.08
87	92	105.28	3,149.69	18.72	12,691.48	121.47
88	111	123.06	3,663.69	16.32	13,556.87	6.82
89	116	149.68	4,539.23	23.90	15,350.53	13.23
90	134	154.01	5,361.10	18.11	11,485.90	—25.18
91	138	—	5,586.60	4.21	10,397.30	—9.48
92	149	—	6,020.30	7.76	12,299.10	18.29
93	153	—	8,201.70	36.23	18,098.70	47.15

Note : At present 6 debentures are listed on the DSE.

Source : Various issues of Stock Exchange Review, Dhaka Stock Exchange.

each issue listed on the exchange by the number of shares listed to find out the market price for each issue and then totaling them to find out the total market price for all issues listed on the exchange. It serves as a means to evaluate the importance of the stock market as a capital market. It could also be used to find out the share of the stock market in national income as well as to compare it with the total savings, industrial capital and the like. It yields a different perspective from that provided by judging the market from the stock price index.

The growth pattern of listed securities shows an encouraging picture. Table— II indicates an expanding condition of the DSE year after year in terms of number of securities enlisted, paid up capital and market capitalization. However, the rate of increase in paid up capital gradually declines while the rate of increase in market capitalization gradually rises except for 1988 and 1989 when the capitalization rate appears to be declining. Increasing rate of capitalization indicates higher demand for securities resulting higher price. The market capitalization of the listed securities was exceptionally high in 1987 when it increased by 121. 47% compared to 64. 08% in 1986 and 54. 78% in 1985. Quite clearly, the investors continued to respond very favorably to market offerings. As it appears, the securities market in Bangladesh demonstrates a recessionary condition thereafter. In spite of general increase in the number of securities, market capitalization or paid up capital, the present size of the Bangladesh market is very small as compared to the securities market in other South Asian countries.<sup>1)</sup> It is believed that more efforts could be made to attract more securities on the floor of the DSE.

### Trading in Dhaka Stock Exchange

Stock exchange trading market refers to those transactions which take place on the floor of the stock exchange. The exchange market is a systematized and precisely definable focal point for stock. Here the organizational and operational limitations of DSE trading are outlined below :

i ) There should exist a fixed market place for stock transaction and the reported price should reflect current conditions. But it is reported that sometimes transactions of the listed securities are arranged outside the exchange. Thus, it is possible that a transaction in a stock may have occurred on the exchange long time ago and yet that price continues to be reported as the current one, even though it is well known that a transaction could not take place at that level.

ii ) Out of 195 members of DSE, only about 20 to 25 members participate in the daily trading while other members engage in other activities. In other words, not more than 10% of

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1 ) Fact Book, 1985—86, Dhaka Stock Exchange, p. 11.

the members engage themselves in securities business. Imperatives for the creation of a viable stock exchange is an active membership which devotes its time and energies to the securities business. In general the present membership of the DSE does not fit this image. The members should genuinely regard the securities field as his business, recognize the public responsibilities of conducting this business and should be able to earn a living from his activities in this field.

iii) Except for a minimum capital requirement of Tk. 1.0 million, there are no financial stipulations in the listing rules. Nor is anything said about methods of trading, protection of customers, conduct of members, and the regulatory role of the exchange. Thus, the exchange does not appear to have developed a body of rules and regulations to prescribe either its own activities or those of its members as would ordinarily be expected of an effective exchange organization.

iv) The members of the DSE do not operate margin accounts for general investors and do not promote the cause of the stock exchange or the securities business at the desired level. The members only buy and sell on behalf of clients on receipt of specific commission. There is no provision in Bye-laws of the Exchange for undertaking market making role.

v) The delivery of certificates and payment of proceeds in the exchange is not being done properly and systematically. There is no well organized clearing cell for the purpose of ensuring proper and systematic transaction. Thus there remains the scope for dummy transactions.

vi) Modern trading methods are absent in the DSE. Electronic board, microphones etc. are not used by the Exchange during auction time. In view of the above limitations, the DSE needs to be reorganized so that the very objectives of the stock exchange can be achieved.

Let us now see the stock market transaction volume in Bangladesh. During the pre-independence period upto 1971 there were 190 companies with a total paid up capital of

Table – III  
Average Monthly Turnover of Shares on DSE

Year	No. of Shares	Amount in Tk.	%Increase in value
1984	17968	841465	—
1985	49320	2689137	219.58
1986	70762	3987637	48.29
1987	156361	14804721	271.27
1988	85328	10836162	—26.81
1989	184351	14477272	33.60

Source: Compiled from the various issues of Stock Exchange Reviews,  
Dhaka Stock Exchange.

Tk. 4.0 billion listed on the DSE and the average daily transaction were about 20,000 shares.<sup>1)</sup> But since the resumption of stock market activities in 1976, the number of securities listed on DSE is increasing every year which is 153 in June 1993 with a total paid up capital of Tk. 8201.70 million.

Table – III shows that trading in shares, both in terms of volume and value, have recorded a phenomenal upsurge with positive rate of increase in all years except 1988. The years 1985 and 1987 recorded an increase of more than 200% of their respective preceding year in terms of value. Average monthly transaction in 1989 stands at Tk. 144,77,272 compared to Tk. 108,36,162 in 1988 which is 33.60% bigger but still it is lower than that of 1987. However, in terms of number of shares the figure of 1989 exceeded that of 1987. It thus, indicates a fall in share price after 1987.

The increasing operational dimension of DSE is, perhaps, due to various steps taken in the industrial sector. Among others the following factors are important.

- i) Downward revision of the time deposit interest rate.
- ii) Growing participation by the overseas wage remitters.
- iii) Switching over of local wage earners dealers to the stock exchange operations.
- iv) Exemption of income tax of individual shareholders and reduction of corporate taxes as declared in the budget of 1987–88.

Thus the capital market is gaining ground in Bangladesh. Stock prices of certain scrips are surpassing all records of contemporary history. There are a few particular cases where stock quotations have gone up 15 to 20 times the face value. A head-lined news item reported that about 300% rise of general share value over one year till first week of May 1987.<sup>2)</sup> Even the operational level of pre-independence days could not be reached.

### III. DIVIDEND POLICY AND PRICE-EARNINGS (P/E) RATIO

The important aspect of the dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are preferred to external sources of fund for financing the growth. Conversely, investors prefer a dollar of dividends to a dollar of capital gains, because 'a bird in the hand is worth more than one in the bush'. Proper balance between these two objectives needs to be evolved in formulating a dividend policy.

Gordon<sup>3)</sup> says that for most companies generous dividend payouts tend to lift price-earn-

1) Fact Book, 1987, Dhaka Stock Exchange, p. 16.

2) The daily Bangladesh Observer, dated 13.6.1987

3) Gordon, M. J., The Investment, Financing and Valuation of the Corporation, Homewood : R. D. Irwin, 1962. P.70.

ings ratios, and niggardly payouts to depress them. According to him, it is rational to prefer the certainty of a dividend payment now to the uncertainty of a possible future (realized through growth) flowing out of retained earnings. However, the findings of Modigliani and Miller<sup>1)</sup> shows that dividend do not count, i. e., they contends that investors are essentially indifferent to the level of dividends and that therefore they have virtually no effect on price earnings ratios at least if transaction costs and taxes are ignored. Still a third view has been pronounced by Friend and Puckett<sup>2)</sup> who have shown that in non growth industries—they included food and steel in this category—investors tended to value dividends somewhat higher than retained earnings ; but the opposite, they feel, is true for growth industries—identified as electronics, utilities and chemicals.

Thus the issue is still unresolved and Black<sup>3)</sup> has rightly concluded “What should the corporation do about dividend policy ? We do not know.”

#### Dividend Yield of the Enterprises

Stocks differ from ordinary commodities in that the purchaser of stock does not expect to derive any benefit from the direct consumption of the stocks themselves. Thus it becomes necessary to consider the value of stock in a way different from that which we do with other commodities. If one looks at the physical aspects of the enterprise, such as the plant and equipment, then the net assets per share do have bearing on the stock price of that enterprise. However, the net assets are, in a sense, the liquidation value of the enterprise and as such, are not necessarily the most suitable measure of the value of stock in a going concern.

Table – IV has shown a comparative position of the stock dividend yield, average dividend rate of the listed companies on the DSE and Tokyo Stock Exchange (TSE) and annual time deposit interest rate in Bangladesh and Japan. When seen from a long-term point of view, the yields of cash-dividend-paying stocks have almost consistently been dropping till recently in both Japan and Bangladesh. In DSE the dividend yield was 12.9% in 1980 which declined rapidly afterwards. In 1989 it is less than 3 %. Similar trend is observed for the stocks of TSE. Average dividend rate in Bangladeshi companies was 13.97% in 1980 which also demonstrates a declining trend in subsequent years. However, the dividend rate of Japanese companies appears to be somewhat stable with increasing trend. The important point is that the dividend rate and yield in Bangladesh is lower than the time deposit rate of interest whereas in Japan

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1) Miller, M. H. and F. Modigliani, “Dividend Policy, Growth, and the Valuation of Shares”, *Journal of Business*, October 1961, pp. 411–33.

2) Friend, I. and M. Pucket, “Dividends and Stock Prices”, *American Economic Review*, September 1964, pp. 656–82.

3) Black, F., “Dividend Puzzle”, *The Journal of Portfolio Management*, Winter 1976, p. 8.

Table— IV  
Changes in Time Deposit Interest Rate, Dividend Yield  
and Average Rate of Dividend

Year	Time Deposit Interest Rate (1 year)		Stock Yield		Average Dividend	
	B'desh	Japan	B'desh	Japan	B'desh	Japan
1976	8.25%	6.75%	—	1.91%	—	12.50%
1977	8.25	5.25	—	1.82	—	12.68
1978	8.25	4.50	—	1.60	—	12.90
1979	8.25	6.00	—	1.57	—	12.98
1980	14.00	7.00	12.90%	1.63	13.97%	13.16
1981	14.00	6.25	12.20	1.55	13.88	13.38
1982	14.00	5.75	11.30	1.68	12.68	13.62
1983	14.00	5.75	9.90	1.39	11.98	13.76
1984	14.00	5.50	5.70	1.09	8.32	14.22
1985	14.00	5.50	10.70	0.99	18.20	14.50
1986	14.00	3.76	5.40	0.74	11.75	14.66
1987	13.25	3.39	3.50	0.59	13.41	14.72
1988	13.25	3.39	1.80	0.51	6.21	15.04
1989	13.25	4.32	2.90	0.45	10.17	15.56

Note : Time deposit interest rate is as of the end of December each year.

Source : For data relating to Japan, Tokyo Stock Exchange Fact Book 1986 and Japan Securities Research Institute, Securities Market in Japan, 1992. and for data relating to time deposit interest rate of Bangladesh Economic Trends, Bnagladesh Bank—different issues and that of dividend compiled and computed from the data preserved by the computer of DSE.

although dividend yield is lower than time deposit interest rate but dividend rate is higher than that.

Low yield is attributable either to the lowering down of dividend by the enterprises or to the higher market capitalization as it appears from the following formula :

$$\text{Dividend Yield} = \frac{\text{Current Dividend}}{\text{Current Market Price}}$$

Both increasing market capitalization and decreasing cash dividend exist in Bangladesh. However, Table — IV shows that the rate of yield decrease is more than the rate of decrease in cash dividend. This indicates that only low dividend is not responsible for low yield rather higher market capitalization is also contributing to lower yield. In case of Japan, businesses have mostly been taking a dividend policy that it is enough to pay a certain fixed percentage of

the face value as dividends steadily and continuously, while stock prices went up and remained high.<sup>1)</sup> Accordingly, the dividend yield has gone down. The time deposit interest rate is much higher in Bangladesh. Thus the dividend rate and dividend yield are relatively lower in Bangladesh when bank interest rate is taken into consideration.

Table— V shows the number of companies at different levels of dividend. It appears from the Table that among the dividend paying companies the median rate is within the range of 16 to 25% and the number of companies who pays more than 25% is small. However, it gives the impression that most of the dividend paying companies paid a good amount as dividend although the number of dividend paying companies is not large.

Table— V  
Companies at Different Levels of Cash Dividend

Year	No. of Listed Companies	No. of Companies Paid Dividend	Number Paying		
			5 to 15%	16 to 25%	26% and above
1981	26	21	10	10	1
1982	29	22	12	9	1
1983	44	25	6	15	4
1984	58	35	8	18	9
1985	72	45	18	18	9
1986	82	43	14	21	8
1987	90	53	18	25	10
1988	111	46	17	16	13
1989	116	61	22	24	15

Source : Compiled from the dividend data preserved in the DSE computer.

### Price Earnings Ratio

The price earnings (P/E) ratio is an index obtained by dividing the stock price by the earnings per share to show the ratio between these two figures. As such, it is another criteria for investment decisions. Having been used in the developed economies since 1920's, P/E ratio has a long history. Recently investors particularly institutional investors have come to consider it more important than yield.

The most common traditional index for investment decisions is yield obtained by dividing the annual dividend by the purchase price of the stock. As such, they enable the investor to determine the maximum price he can pay for a stock issue with a given dividend per

1) Tokyo Stock Exchange Fact Book, 1986, p. 6.



share when he wants to secure a certain rate of return on the investment in comparison with savings, interest rates and bond yield. In other words, yield emphasizes the dividend rate. P/E ratio, on the other hand, goes one step further and emphasizes the relationship between the potential profit per share and stock price.

Generally, the yield on stocks should be higher than that on such fixed-interest bearing securities as bonds and debentures because it is recognized that stocks involves higher investment risk than fixed-interest bearing securities. However, with the rapid economic growth of the postwar era and the development economic policies, this relationship began to reverse itself around 1955 and stock purchases continued even when their yield fell below that of bonds and debentures which is known as "yield revolution". As this "yield revolution" became common in the United States, Europe and Japan, the emphasis upon P/E ratio grew even stronger.

We have calculated average P/E ratio for the listed stocks on DSE on December 31 every year which appears at Table—VI. The Table shows that the highest P/E ratio is found in 1987 and the lowest in 1988. This is consistent with the general price rise in 1987 and general price fall in 1988.

One of the oft-repeated charges against the dividend policy in Bangladesh is that dividend paid is small and not in due time.<sup>1)</sup> At times, however, this charge may appear to be quite true ; but a patient inquiry reveals that the policy is circumstantial. Our jute industry is a glaring example where no dividend or very low rate of dividend is paid for a long time. Otherwise, in general, the dividend declared can not be regarded as too unreasonable. Of course, inordinate delay between declaration of dividend and its payment is a real phenomenon in cor-

Table—VI  
Average P/E Ratio of the Listed Stocks on DSE

Year	P/E Ratio
1986	10.30
1987	28.91
1988	8.07
1989	25.53

Source : Average is calculated from the P/E ratio of individual enterprise given in the various issues of DSE Stock Exchange Reviews.

Note : P/E ratio is calculated in December every year.

1) Kashem, H. Abul, "Pujir Bazare Noirajya" (Indiscipline in Capital Market), Bichitra, a Bengali National Weekly, dated 26—7—1985, p. 32 and Shafique, M., "ICB Karjayakram Behoto Hosse Keno?" (Why are the Activities of ICB Hampering?), Bichitra, dated 19—9—1986, p. 16.

porate behavior of Bangladeshi enterprises.<sup>1)</sup>

In this connection price-earnings (P/E) ratio of the listed stocks with regard to their dividend payment has been examined. For this purpose all the listed stocks have been classified into three groups, e. g., those companies who never paid dividend, those who paid dividend every year and those who paid dividend in some years but not in others. The average P/E ratio calculated for these three groups on 31-12-89 are shown at Table – VII. Companies paying dividend every year have an average P/E ratio of 20.22, a number suggesting that the market regards dividend and regular dividend stimulated the price. The average P/E ratio of those companies who paid no dividend is 1.95 and the average P/E ratio of the companies who paid dividend continually is 3.67 which is between the two extreme groups. It thus indicates that dividend policy stabilization might have been counted by the general investors and influenced the P/E ratio of the enterprises in Bangladesh.

Table – VII  
Average P/E Ratio of the Companies According to Their Cash Dividend

Companies	PER
i . Paid Dividend Every Year	20.22
ii . Paid Dividend in Some Years but not in Others	3.67
iii . Paid No Dividend	1.95

Notes : i . Two cases of abnormally high P/E ratio have been excluded.

ii . P/E ratio of individual enterprises has been used for our purposes from the Stock Exchange Review, DSE, January to March 1990.

In Bangladesh preference for dividend is evident from the fact that investors are mainly interested in buying the shares of the big companies who pay higher rate of dividend and who has higher degrees of goodwill. On the other hand, when a company is closely held, as it occurs in Bangladesh, its management may prefer, for tax or expansion reasons to keep dividend payments low, thereby tending to reduce potential investors' interest.<sup>2)</sup> In order to restrain management from withholding dividend payments despite available earnings, Bangladesh had a penalty tax that was imposed if a company earned a certain level of profits and did not declare dividend. This was eliminated in 1978 so that management may retain more of the earnings and thereby facilitating expansion.<sup>3)</sup>

1 ) Ibid.

2 ) Robbins, S. M., op. cit., p. 18.

3 ) Robbins, S. M., 1980, Ibid., p. 18.

It has been seen that in Japan low dividend payments favors bottlenecks for the capital market to play its due role as a pool of long-term funds for business enterprises and in providing better investment opportunity for investors.<sup>1)</sup> Thus it is implied that Government should choose such a policy which will be in between readopting the former tax policy that will help the securities market and thereby benefit capital formation in the long-run, or exempting the tax in order to benefit capital formation in the short-run.

#### IV. CAPITAL ASSET PRICING MODEL (CAPM) : SOME EVIDENCES

Under conditions of complete certainty, perfect capital markets and rational, wealth maximizing behavior, the central normative proposition in the micro-theory of investment can be stated as “..... the firm should adjust its capital stock until the marginal rate of return on further investment (or disinvestment) is equal to the cost of capital”.<sup>2)</sup> Since by these assumptions, there can exist one and only one rate of interest for any holding period, and since it is assumed that all future cash flows are fixed, the solution is both well-known and simple. However, the potential investor, individual or corporation, is faced with a capital market of considerable sophistication offering a wide range of investment opportunities. It is with the problems surrounding choice under uncertainty that Markowitz<sup>3)</sup> and Tobin<sup>4)</sup> first concerned themselves. Later, among others, Sharpe<sup>5)</sup>, Lintner<sup>6)</sup> and Mossin<sup>7)</sup> investigated the implications of this model for the equilibrium structure of asset prices.

Using these capital market theories there has been little research that deals with the securities market of Bangladesh. Since 1976 with the reactivation of Dhaka Stock Exchange (DSE) the structure of the Bangladesh financial market has changed and the number of listed securities has been increasing rapidly in the DSE. Thus the function of stock market has got increasing importance. Therefore, it is important to survey the Bangladesh stock market with

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1) Ahmed, M. Farid, “A Study of Stockholding-Structure in Japanese Business Group”, The Economic Science, Nagoya University, Japan, Jan. 1988, pp. 205–36.

2) Miller, M. H. and F. Modigliani, “Some Estimates of the Cost of Capital to the Electric Utility Industry”, American Economic Review, June 1966, p. 333.

3) Markowitz, H. M., “Portfolio Selection”, Journal of Finance, Vol. 7, 1952.

4) Tobin, J., “Liquidity Preference as Behavior Towards Risk”, Review of Economic Studies, Vol. 25, 1958.

5) Sharpe, W. F., “Capital Asset Prices : A Theory of Market Equilibrium Under Conditions of Risk”, Journal of Finance, September 1964.

6) Lintner, J., “The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets”, The Review of Economics and Statistics, February 1965.

7) Mossin, J., “Equilibrium in a Capital Asset Market”, Econometrica, October 1966.

the hope that it will induce further research on this subject.

In this Section we shall examine the risk–return relationship for the stocks listed on the DSE. The objective of our analysis is to clarify whether or not the asset pricing model works in Bangladesh stock market. The answer to this question implies among others, a test of Capital Asset Pricing Model (CAPM). An attempt has been made to that end.

#### Behavior of Stock Market in Bangladesh

Here we shall start by reviewing the behavior of the rate of return on common stocks listed in the DSE. This will reveal some of the fundamental features of the Bangladeshi stock market. Two questions may be asked : i ) What rate of return do investors earn on the average from their investments in the stocks ? ii ) How much risk do they bear ?

The rate of return on equity during an investment period is defined as the growth rate of the total market value of the stock from the beginning to the end of the period. It can be calculated as a ratio dividing the sum of the capital gain ( $P_t - P_{t-1}$ ) and the dividend ( $D_t$ ) by the amount of the initial investment ( $P_{t-1}$ ) as follows :

$$R_t = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}} \quad (1)$$

There is no readymade return figures of stocks traded in DSE. We have calculated the monthly rates of return on selected stocks and monthly market rate of return from the market index prepared by Bangladesh Bank using the above formula.

Investment in stocks involves risk. Table – VIII shows the average monthly market rate of return and interest rate on time deposit for the period of 10 years from 1980 to 1989. The table brings out that the average monthly market rate of return for the period is 3% while the corresponding monthly interest rate on time deposit is about 1.14%. When the yearwise average monthly rate of return is compared with the monthly rate of interest on time deposits (which is considered as risk-free return) the rate of return on stocks is found considerably high in all these years. Apparently the standard deviation of interest rates is nearly zero. This indicates that the risky assets yield higher return. Thus the theory of higher risk associated with higher return and low risk with low return appears to be consistent with our empirical data. This is also true, in general, in case of the average return and risk combination of individual stocks as we see later. That is, the stock yielding higher rate of return is associated with higher risk and vice versa. It appears that stock investment in Bangladesh is attractive although fluctuations in return is observed. This is what is meant by risk.

When we see the average monthly rate of earnings for each year, we find that rising tendency is followed by a falling one resulting in periodical fluctuation. Thus as it is expected, changes in earnings rate do not move in one direction.

Table—VIII  
Yearwise Average Monthly Market Rate of Return and Monthly  
Rate of Interest on Time Deposit

Year	Average Monthly Market Rate of Return	Monthly Rate of Interest
1980—89	3.00%	1.148%
1980	1.21	1.167
1981	1.27	1.167
1982	1.39	1.167
1983	2.07	1.167
1984	3.64	1.167
1985	1.97	1.167
1986	3.68	1.167
1987	11.48	1.104
1988	2.24	1.104
1989	1.06	1.104

Notes : a ) Time deposit interest rate is as of the end of December each year.

b ) Monthly rate of interest is calculated through dividing annual interest rates on time deposits by 12.

#### Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) is a method employed for knowing the stock prices that are set everyday. It can serve as a real signals of the allocative efficiency of capital resources. CAPM is aimed at providing analytical framework for finding possible solution to some of the problems inherent in classical economic approaches to investment decisions. One of such problems is the failure to explicitly recognize risk in relation to investment return. An investor using CAPM may deliberately choose a higher than average portfolio risk on which he would expect to receive a correspondingly higher return. The cautious investors may choose a lower degree of risk and receive a correspondingly lower return. The model for security  $i$  would take the form

$$E(\tilde{R}_i) = R_f + [E(\tilde{R}_M) - R_f] \frac{\text{cov}(\tilde{R}_i, \tilde{R}_M)}{\text{var}(\tilde{R}_M)} \quad (2)$$

Substituting  $\beta$  for  $\frac{\text{cov}(\tilde{R}_i, \tilde{R}_M)}{\text{var}(\tilde{R}_M)}$ , Eq. (2) can be restated as

$$E(\tilde{R}_i) = R_f + \beta_i [E(\tilde{R}_M) - R_f] \quad (3)$$

where  $E(\tilde{R}_i)$  = expected return on security  $i$ ,

$R_f$  = riskless rate of return,

$E(\tilde{R}_m)$  = expected return on the market portfolio, and

$\beta_i$  = beta coefficient which measures the systematic risk of security  $i$ .

However, there are two important problems in testing CAPM. First, it is concerned with expected returns, whereas we can observe only actual returns. Second, the market portfolio should include all risky investments, whereas most market indexes contain only a sample of common stocks.<sup>1)</sup> But Myers and Rice have refuted this critique to the extent that they have shown that under fairly general conditions, performance tests using the CAPM can give meaningful results.<sup>2)</sup> There is a general agreement that  $\beta$  is a useful measure of the risk of a security or portfolio and high beta securities are priced to yield a correspondingly high rates of return.

A major breakthrough in the practical utilization of portfolio theory came with Sharp's<sup>3)</sup> development of the market model. He suggests the use of a broad based average like Dow – Jones Average as a surrogate for market index. For security  $i$  the market model is

$$\tilde{R}_i = \alpha_i + \beta_i \tilde{R}_m + \tilde{\epsilon}_i \quad (4)$$

Here  $\alpha_i$  and  $\beta_i$  are parameters of respective securities,  $\tilde{\epsilon}_i$  is a random disturbance whose distribution is assumed to have expected value equal to zero and  $R_m$  is the aggregate rate of return on all securities in the market.

This model identifies two elements—systematic risk and unsystematic risk. The former is represented by  $\beta_i$  and the latter is represented by  $\alpha_i + \tilde{\epsilon}_i$ . While systematic risk results from common market factor, the unsystematic risk results from factors unique to a particular security or company or portfolio.  $\beta_i$  can be interpreted as a measure of risk contributed by security  $i$  in total risk as well as market sensitivity of the return on security  $i$ . A value of  $\beta_i$  greater than 1.0 implies a security with both above average market sensitivity and above average risk in the market portfolio, while value of  $\beta_i$  less than 1.0 indicates below average market sensitivity and risk in the market portfolio.

CAPM states that the proper measure of risk of a security is the undiversifiable or systematic risk, commonly referred to as the beta of the security. While this has been shown as a useful concept betas are still unfamiliar to the majority of investors and professional investment advisors in our country. Beta measures the systematic risk of the portfolio or security, that risk which carries a compensation for risk bearing. The average return on the portfolio is predicted to be directly related to the beta of the portfolio.

The correlation of the portfolio to the market index, measured by R-square, indicates

1) Roll, R., "A Critique of Asset Pricing Theory's Test", *Journal of Financial Economics*, March 1977.

2) Myers, D. and E. Rice, "Measuring Portfolio Performance and Empirical Content of Asset Pricing Models", *Journal of Financial Economics*, Vol. 7, 1978.

3) Sharpe, W. F., op. cit.

how much of the variability in the returns on the portfolio or security is associated with variability in the market. The higher  $R^2$ , the more perfectly diversified the portfolio is. An  $R^2$  equal to one would indicate perfect correlation.

CAPM suggests that high-risk, high-return strategy will return more on the average than low-risk, low-return strategies and that high-risk, high-return strategy will bring greater losses in bear markets than will low-risk, low-return strategies.

The average return of a portfolio is simply the weighted average of the average returns of its component securities where the proportions of value are used as weights. Moreover, the beta of a portfolio is a weighted average of the betas of its component securities, with the proportions of value used as weights. Finally, the beta of a well diversified portfolio provides a good surrogate for its total risk, since almost all fluctuations in the portfolio's value will follow market swings.

Stocks with high beta values should have high returns on the average. They may be said to be in a high risk-return class. On the other hand, stocks with low beta values should have low returns on the average. They may be said to be in a low risk-return class. This relationship may be used as a basis for selecting an investment strategy. If one desires high return he should select stocks that will, in fact, have high beta values in the future. An obvious possibility involves the measurement of beta in the past, on the assumption that beta is reasonably stable over time which procedure was used by Black et al.<sup>1)</sup>

### Testing Methods and Empirical Results

In this study we have used the end of the month price data, data relating to dividend and stock split, if any, of the 25 selected stocks enlisted on the DSE, the only stock exchange of Bangladesh. The end of a month price is considered as the beginning price of the next month. These data were taken from the Investment Scoreboard data published in the Stock Exchange Review, a bi-monthly publication of the DSE. We have calculated the monthly return of each stock from these data using Equation (1). In case of non-availability of Stock Exchange Review we have collected the same type of data from the DSE quotation published in The daily Bangladesh Observer.

We have selected 25 stocks for the period of 5 years from 1985 to 1989 representing most of the industries. We selected this recent period for our investigation considering easy and reliable data availability. Market return is calculated from the General Price Index data constructed by Bangladesh Bank and dividend data preserved by the computer of DSE to use it

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1) Black, F., M. C. Jensen and M. Scholes, "The Capital Asset Pricing Model: Some Empirical Tests", in Studies in the Theory of Capital Markets, M. C. Jensen (ed.), Praeger Publishing, 1971.

as surrogate for market.

Risk can be measured in many ways. We focus on a measure that highlights the impact of swings in the market on the return from a security or portfolio. If there were no prospect of bear market, there would be little risk in the common meaning of the term. Stocks are considered risky because they can go down. Typically, the more sensitive a security or portfolio is to swings in the market, the more it goes down in a bear market. In order to measure it, we use the slope of a regression line relating return on the portfolio to the return on a broadly-based portfolio used to represent "the market". We term the slope of such line as "beta". More formally, it is the covariance between  $R_i$  and  $R_m$  divided by variance of  $R_m$ . The covariance is  $\frac{\sum_{t=1}^N (R_{it} - \bar{R}_i) (R_{mt} - \bar{R}_m)}{N}$  and variance is  $\frac{\sum_{t=1}^N (R_{mt} - \bar{R}_m)^2}{N}$ . For the purpose of this study,

return calculated from the General price Index of Bangladesh Bank has been used to measure  $R_m$ .

It is important to recognize that beta may not provide an adequate measure of the total risk of a stock. However, for well diversified portfolios, the majority of the variation in return is attributable to changes in the return on the market. Thus beta provides a good measure of risk. It seems worthwhile to examine the results of a simple test of CAPM to see if, higher return has been associated with higher risk as measured by beta. Sharpe and Cooper<sup>1)</sup> examined the enlisted stocks of New York Stock Exchange whether following alternative strategies, with respect to risk would produce returns consistent with Capital Asset Pricing Model (CAPM). We have followed the general approach of Sharpe and Cooper with some modifications for the stocks of DSE.<sup>2)</sup> Beta at a point of time is measured using 12 months of previous data. This procedure was repeated every year. Table—X shows the realized rates of return and the betas of many different assets during the period 1985 to 1989. The risk-return relationship in most cases appears to be consistent with general principle of higher beta is related with higher return.

In order to get portfolios with different betas we have divided stocks into five risk-classes on the basis of the beta of each security. In other words, selected stocks were divided into five classes based on their rank by beta. Classes/strategies are numbered from 1 to 5. An equally weighted portfolio was formed of the stocks that comprised each class. That is, stocks are bought and sold until the portfolio contains equal investment amount in all stocks of

1) Sharpe, W. F. and Cooper, G. M., "Risk-return Class of New York Stock Exchange Common Stocks, 1931 — 1967", Financial Analysts Journal, March–April 1972.

2) The differentiating features of this study are mainly: First, they apply the model in a developed market we apply it in a developing market. Second, they require 60 months of data to estimate a security's risk-return class, we require only 12 months. Third, we use monthly return they use annual returns.



Table—X  
Rates of Return, Standard Deviation and Beta for Selected  
Companies, 1985–1989

Name of the Companies	Average Monthly Return	Standard Deviation	Beta
Glaxo angladesh	0.1397	0.4570	2.2660
National tea Co.	0.0187	0.0863	1.1570
Singer Bangladesh	0.0463	0.1443	0.9016
Burma Eastern	0.0808	0.2363	0.7123
Paper Converting	0.0212	0.0851	0.6004
Bangla Process	0.0019	0.0795	0.5762
Bangladesh lamp	0.0375	0.1182	0.5661
Second ICB Mutual Fund	0.0944	0.1301	0.5245
Pubali Bank	0.0103	0.0798	0.5223
Bangladesh Shipping Co.	−0.0057	0.0479	0.4962
Ashraf Textile	0.0262	0.1042	0.4024
First ICB Mutual Fund	0.0637	0.1602	0.3915
Oxygen Bangladesh	0.0919	0.2535	0.3541
Uttara Bank	0.0244	0.0730	0.3461
Monno staffers	0.0203	0.0513	0.3309
Islami Bank	0.0056	0.0557	0.2865
Monno Ceramic	0.0236	0.0845	0.2818
Apex Foods	0.0294	0.0775	0.2267
National Bank	0.0105	0.0640	0.2220
A. B. Bank	0.0226	0.1579	0.1960
Delta Jute	0.0018	0.0057	0.1368
Bengal Carbide	0.0491	0.1044	0.1223
GMG Industrial Corpn.	−0.0035	0.0239	0.0678
Bangas	0.0422	0.1183	0.0234
ICI	0.0042	0.0624	0.0155

Note: For 1989 only 8 months from January to August have been considered.

a particular risk–return class at a point of time. Rebalancing is, therefore, required both to accommodate changes in the set of stocks in a class and to account for price changes.

Table—X shows what would have happened, on average, if an investor had done this for the period from 1985 to 1989. It appears that the strategy/class on the basis of beta value can actually be followed by an investor of the DSE. If any investor wants to pursue the high

Table— X  
Average Return and Portfolio Beta

Strategy/Class	Average Return	Portfolio Beta
5	0.06	1.13
4	0.03	0.54
3	0.05	0.37
2	0.02	0.24
1	0.02	0.07

beta strategy, he simply divides his funds equally among the stocks in the highest beta class. If we see the average monthly return for each strategy we find that strategy 5 provided a return of 0.06 per month while strategy 1 provided 0.02. The values do not maintain perfect uniformity but the general relationship is of the expected type, i. e., portfolios composed of securities in lower risk–return strategies/classes tend to provide lower average return. The coefficient of determination between strategies and return is about 0.71.

Table— X also shows that the actual values of portfolio beta for the five strategies. Returns obtained with strategy 5 moved 13% more than the market as a whole. On the contrary, returns obtained with strategy 1 moved only 7 % of the market as a whole. In this case also the values do not decrease with perfect uniformity. However, the general relationship appears to be of the expected type, i. e., portfolios composed of securities in lower risk–return classes tend to move less with swings in the market.

The next logical step is to examine the relationship between the return that would have been earned and the risk (beta) from following alternative strategies. This relationship appears to be positive and linear. The equation of this relationship is

$$\tilde{R}_i = 0.017 + 0.04\beta_i \quad (5)$$

By and large, stocks with higher betas have produced higher return. In fact,  $R^2$  Between return and risk (beta) is 0.71. That is, about 71% of the variation in expected return is explained by differences in beta. Thus beta has explained a very significant portion of the differences in return between these portfolios. Accordingly, this study suggests with clear and easily interpreted evidence that, as the general equilibrium theory indicates, there is a positive relationship between return and beta. Of course, only one strategy is found to be riskier than the market. We should note that due to many factors, the result may conform less with expectations as the time–period studied is shorter and the number of companies is smaller.

The main results of this study show that roughly 30% of total risk of a portfolio of stocks listed on the DSE can be eliminated by diversification and the remaining systematic risk which can not be diversified away can be measured by beta.

The implications of these results are substantial. First, we would expect realized rates of return to be related to the systematic risk as opposed to total risk of securities. Since the unsystematic risk is relatively easily eliminated, we should not expect the market to offer a risk premium for bearing it. Second, the beta gives the systematic risk of a security or portfolio relative to the risk of the market index. Thus it is often convenient to speak of security or portfolio risk in terms of systematic risk or beta. Since the beta is reasonably stable over time<sup>1)</sup> buying of stocks/portfolios with higher forecast beta would lead to holding portfolios with higher realized return.

The results of this study still raise some questions about adequacy, nature and content of information set postulated by the capital market theory. Obviously, the information set is not complete and it is much smaller than the information set used in advanced economies.

One possible implication arises with the CAPM application is the issue of calculating the cost of capital. A popularly accepted method of calculating cost of capital depends on the CAPM theory to defend the use of beta. Our empirical analysis shows that this method may bring forth good results in practice. Thus it appears to be a good example of a theoretically elegant model that gives a good answer. However, we may conclude that theories and methods that are dependent on the CAPM require careful attention and scrutiny when they are applied to the analysis of actual problems.

## V. SOME JAPANESE EXPERIENCES AND THEIR RELEVANCE FOR BANGLADESH

Here, an attempt has been taken to blend financial theory with an understanding of the structural context of Japanese capital market, particularly, during post-war period. The structural context is critical since it represents the framework within which the economic forces operate. That is, we aimed at investigating how a particular market structure, characterized by imperfection and segmentation, gave rise in understandable ways to distinctive financial practices. Discussion concerning the condition of Bangladesh capital market is provided where deemed relevant.

### Ownership Structure of the Market

Since the Securities Democratization Movement, initiated under the leadership of the Securities Democratization Committee in November 1947 had released to the general public the large number of shares gathered in the hands of the Holding Company Liquidation Commit-

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1) Black F., et al., op. cit.

tee upon the dissolution of the zaibatsu,<sup>1)</sup> share ownership by individuals exceeded 60%. However, this proportion has been declining year after year while the share ownership by business corporations and financial institutions have been gradually rising.

If this trend continues, the importance of individual investors in the stock market will come down to a point where trading in stocks would loss momentum and formation of fair prices would be hampered. The effectiveness of stock market may be weakened to such a level where it would be difficult for corporations to raise funds by selling their equity shares at market price. Thus the stock market may be prevented from playing its due role as a pool of long term funds for business enterprises and in providing investment opportunity for the investors. Moreover, strengthening of control by corporate investors over other corporations through increasing stockholdings may weaken the institutional device of joint stock company as an economic agent.

A comparative picture of the composition of shareownership structure in Dhaka Stock Exchange (DSE) and Tokoy Stock Exchange (TSE) is shown at Table XI . The share of the sponsors/directors is the highest in DSE which is 54.69% and 46.24% in 1983 and 1984 respectively.

Table XI  
Composition Stockownership of DSE and TSE

Category	DSE		TSE	
	1983	1984	1984	1985
Government	13.40	11.29	0.3	0.4
Investment Corporation of Bangladesh (ICB)	10.67	12.33	—	—
Bank and Financial Institutions	3.40	7.61	37.4	38.0
Sponsors/Directors	54.69	46.24	—	—
Individuals and others	17.84	22.48	33.0	30.0
Business Corporations	—	—	27.6	29.5
Securities Companies	—	—	1.7	1.8

Source: Data relating to Dhaka Stock Exchange, DSE Fact Book 1984 and data relating to Tokyo Stock Exchange, TSE Fact Book 1986.

1) Zaibatsu or the big business corporations, which originated in Japan during the Second half of the Meiji period, had their nucleus in certain wealthy merchant families. They played a very significant role in the development of Japanese industries during the 1920s and 1930s. They were dissolved by the SCAP Authorities in order to disseminate the ownership breaking the concentration in the hands of a few families at the end of the World War II.

The above statistics disclosed the following highlights:

i ) The individual ownership has been consistently losing ground to a record low in TSE. This share of individual investor is far lower in DSE. If the Sponsors/Directors share is shown as individual investor this share becomes pretty high. Of course, this indicates high concentration of ownership of stock in few hands.

ii ) The ownership of business corporations has been rising year after year and in 1985 this share rose to 29.5% in Japan but this has not yet been developed in Bangladesh.

iii ) The ownership of banks and financial institutions has also been rising in Japan. Although this share is also rising in Bangladesh, it is less than that of Japan. If the share of ICB is included in this category, even this share is less than that of Japan.

It is needless to say that in Japan the motive behind institutional stockholding was not the search for investment earnings directly rather strengthening their business relations or creating a stable spectrum of stockholders. It is the phenomenon of so-called "stable shareholding arrangement" (kabunushi anteika kosaku). This resulted in chronic shortage of shares on the market.

### Market Segmentation

Internal capital market in Japan enables firms, as opposed to individuals, to diversify their risks and affords the management of firms insulation from external capital market forces, particularly from the market for corporate control.<sup>1)</sup> Following Nakatani and Williamson financial corporate grouping may be viewed as a kind of internal capital market.<sup>2)</sup> The large firms in a financial corporate group is able to avert sudden bankruptcy or takeover because of the back-up received from the financial institutions and other business partners of the group. At the same time, the shareownership of the firm remains largely in tact as a result of the 'stable shareholding arrangement' which characterizes corporate organization in the internal capital market. Thus the operation of an active takeover market has been blocked largely as a result of associations and 'stable shareholding arrangement' among corporations.<sup>3)</sup> The internal capital market can be seen, not only as a means of allowing the firm to diversify risks, but as a way to give managers the necessary autonomy from the external capital market which in turn, ensures "life-term employment" system. Accordingly, management is able to take a long-term

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1 ) Nakatani, I., "The Economic Role of Financial Corporate Grouping", in Aoki, M. (ed.), *The Economic Analysis of the Japanese Firm*, North Holland, Elsevier Science Publishers, B. V., 1984, pp. 227-58.

2 ) Nakatani, I., *Ibid.*, p. 231 ; and Williamson, O., *Markets and Hierarchies*, New York: The Free Press, 1975, pp. 143-48.

3 ) Okumura, H., "Kaisha to Kabunushi no kankei" (The Relationship Between the Firm and Its shareholders), *Shoken Keizai*, Vol. 138, 1981, pp. 59-77 (In Japanese).

view of investment without being preoccupied with the firm's short-term profit position, its share price movements or with the threat of takeover as is the practice elsewhere. Of course, in order to attain better efficiency, the internal capital market has the mechanism through which intervention in the internal management by the 'main bank' usually takes place.

In this connection Aoki's<sup>1)</sup> model of cooperative game between stockholders and employees is noteworthy. Corporate members may wish to engage in a game among themselves where the aim of the game is to determine important policies, such as distribution of organizational rent, growth rate of the firm and corporate financial policy. This cooperative game is possible only when the firm is insulated at least partially from the imperatives of market forces. Business group in Japan may be regarded as a means of insulating group firms from the external market pressure. Thus, interfirm shareholding is used to undermine the general shareholders outside the group over policy-making process of group members. In such a situation if managers act against the interest of general shareholders, the firm's share price will naturally decline even with no possibility of takeover bid.

As we have seen earlier shareholding by business corporation in Bangladesh does not exist as we see in case of Japan. Therefore, in Bangladesh there is no strong business group. Inter-firm shareholding may be encouraged there and thereby internal capital market like Japan. This will help diversification of risk and stabilize stock prices. Thus the industrial development may be quickened.

### Leverage

Leverage decision is significant in influencing shareholders' return and risk. As a result, the marked value of the share is affected by the capital structure decision. Japanese enterprises demonstrate a generally higher debt to equity ratio. The shareholders' equity for all nonfinancial companies listed on the Tokyo Stock Exchange (TSE) in 1985 is 23.4%<sup>2)</sup> which is quite low by U. S. standards. According to Nakatani<sup>3)</sup> the ratio of equity capital to total assets is considerably lower for group affiliated firms by 4 to 9 percentage points. Thus the group behavior of Japanese enterprises appears to have contributed to the low equity level when considered as a whole.

Like Japan the industries of Bangladesh also demonstrate a higher debt to equity ratio. The loan giving agencies previously maintained a policy of 60 : 40 and 70 : 30 debt-equity ratio

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1) Aoki, M., "A Model of the Firm as a Stockholder-Employee Cooperative Game", The American Economic Review, September 1980 and the same author's "Equilibrium Growth of the Hierarchical Firm: Shareholder-Employee Cooperative Game Approach", The American Economic Review, December 1982.

2) Tokyo Stock Exchange Fact Book, 1986.

3) Nakatani, I., op. cit., p. 240.

depending upon geographical location and nature of industry. This ratio has been raised to 70 : 30 and 80 : 20 respectively later. As we have mentioned earlier, the loan recovery position of the loan giving agencies is a much talked about issue and a serious problem for industrial development.

This low equity level may be seen in terms of “Pecking Order Theory” of Myers.<sup>1)</sup> Pecking Order Theory explains a situation when it seems to be not convincing to the potential investors about the investment opportunities of the firm due to asymmetric information that managers might have. They consider management’s endeavor to exploit them in favor of the ‘existing’ shareholders. This may result in under valuation of new issues which are necessary for favorable investment opportunities. Accordingly, the decision rules appears to be, “Issue debt when investors undervalue the firm, and equity, or some other risky security when they overvalue it.” Recent empirical evidence for the U. S. A. also shows that the announcement of a new equity issue reduces the value of previously outstanding shares by 30% of the value of the issue.<sup>2)</sup> Following Myers and Majluf<sup>3)</sup> pecking order suggests that for financing new projects, it is better to use financial slack (cash on hand and marketable securities) than any other sources. However, if the financial slack is not sufficient for the project then low risk debt<sup>4)</sup> may be used as a second choice. It is desirable to issue equity when the debt becomes relatively risky. Besides, the literature on costs of financial distress supports less borrowing for risky firms.<sup>5)</sup>

The higher leverage of Japanese industries can be meaningfully interpreted with Pecking Order Theory. This is because of the fact that the Japanese industries are less risky due to existence of strong business group which does not exist in Bangladesh. Thus the Japanese experiences shows that higher leverage may be permitted in Bangladesh through establishment of business group and thereby reducing business risk.

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1) Myers, S., “The Capital Structure Puzzle”, *Journal of Finance*, July 1984, pp. 575–592.

2) Asquith, P. and D. Mullins, “Equity Issues and Offering Dilution”, *Journal of Financial Economics*, Vol. 15, January–February 1986.

3) Myers, S. and N. Majluf, “Corporate Financing and Investment Decisions when Firms Have Information Investors Do Not Have”, *Journal of Financial Economics*, Vol 13, June 1984.

4) Low risk debt refer to small probability of change in the value of debt. That is, change in debt value is independent of the firm-specific information revealed to investors. Other things, such as general shift in interest rates may change debt value. See Myers and Majluf (1984).

5) Myers, S., “Determinants of Corporate Borrowing”, *Journal of Financial Economics*, Vol. 5, November 1977.

### The Main Bank System

It is a feature of corporate enterprises in Japan that most large firms have close financial, shareholding and managerial ties with a particular bank, known as the 'main bank'. While firms had a clear incentive to borrow, lending to highly levered firms would seem extremely risky from the bank's perspective. The main bank relationship allows the group member firms continued borrowing upto seemingly extraordinary debt to equity ratios. This relationship tends to be both long term and very close, with the main bank being privy to extensive and confidential information on the firms operations as well as its medium and long-term plans. Consequently, the main bank's loan evaluation was typically accepted with little question by other lenders.<sup>1)</sup> There are several striking examples that illustrate this relationship. When Ataka (a large trading company) went to bankruptcy in 1977, its two main banks took almost all losses. Foreign creditors of Ataka lost nothing, although their loans were basically unsecured.<sup>2)</sup> The Nihon Keizai Shimbun analyzed the bankruptcy of J. Osawa together with its affiliates under the heading "The Weakness of Not Having a Main Bank". It has been pointed out that although J. Osawa had borrowing from 70 banks, it did not have a main bank on which it could rely for support at the time of crisis.<sup>3)</sup> A survey of 320 listed firms in 1977 with accumulated losses revealed a high level of representation by the main banks of the group.<sup>4)</sup>

Under uncertainty, usually financial transactions are costly because of the cost incurred for collecting information about the borrowers. It is, therefore, desirable to establish stable long-term business relationships with borrowers than to rely exclusively on short-term spot transactions. Osano and Tsutsui<sup>5)</sup> have shown that implicit contract relationships are prevalent in the Japanese bank loan market. Corporate grouping in Japan seems to provide an ingenious device for such relationship which demonstrates a favorable condition for implicit contract between bank (as creditor) and group enterprises for 'side payments'<sup>6)</sup> and thereby maximize the firm's value under uncertainty.

In Bangladesh, policies have been devised to discourage fixed deposits in the banks recently. One is revising upward the interest rates on advances against Fixed Deposit Receipt

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1) Hodder, J. and A. Tschoel, "Some Aspects of Japanese Corporate Finance", *Journal of Financial and Quantitative Analysis*, June 1985.

2) Prindle, A. R., *Japanese Finance: A Guide to Banking in Japan*, New York: John Wiley and Sons, 1981.

3) "Mein banku no nai yowami" (The Weakness of Not Having a Main Bank), *Nihon Keizai Shimbun*, Evening, February 29, 1984, p. 1.

4) Toyo Keizai Shimposha, *Ginko Obyakasu Ruison 320 sha no Kigyo shindan* (Threat to the Banks: A Corporate Diagnosis of the 320 Firms with Accumulated Losses), *Tokei Nenpo*, 38(4), 1978.

5) Osano, H. and Y. Tsutsui, "Implicit Contracts in the Japanese Bank Loan Market", *Journal of Financial and Quantitative Analysis*, 20, June 1985.

6) Fama, E. F. and M. H. Miller, *The Theory of Finance*, Holt, Rinehart Winston, 1972, p. 180.



(FDR) and the other is lowering interest rate on FDR. Besides, taxing interest income in the form of surcharge also further lower down the rate of interest. These policies apparently aimed at channelizing the funds to direct investment instead of flowing to the banks. But the question arises whether people with excess money would find it profitable and feel secure to invest in company shares other than government savings schemes, such as, Savings Certificates, Defence Certificates etc. Though these schemes offer attractive return and tax rebates, people prefer to save in the banks because of the lack of expertise and salesmanship on the part of savings schemes directorate on the one hand and convenience and nearness of the banks to the customer on the other. Moreover, investment in company shares is still discouraging because the Bangladeshi companies, excepting a very few, still suffer from credibility gap. Investing public feel shy in investing in company shares because they are not sure whether they will get back their principal not to speak of dividend. Under the circumstances, there is a genuine apprehension that a sizeable amount of money saved by the public might go for speculative trade, hoarding, purchase of real estates, gold and other unproductive assets. People may individually decide to invest directly in productive sector in the external capital market. Alternatively, when funds come to the banking sector, this sector may take investment decisions which is known as indirect financing. Japan has demonstrated a good example of the latter through main bank system. This largely explains why in Japan the new issue market has failed to keep pace with the tremendous strides made by the economy along the route to industrialization. Until recently the open market in Japan was far smaller than what it could have been.<sup>1)</sup> So instead of discouraging bank deposit, indirect financing through main bank system needs to be given emphasis in Bangladesh in order to meet the needs of the time.

### Managing Agency System

Historically both Bangladesh and Japan have furnished only a fraction of total financing through issue of corporate securities. In the pre-independence days industrial entrepreneurship in Bangladesh was a close preserve of a few already established business houses, as evidenced by the concentration of industry in the hands of a few Managing agents. Much of the capital reached Bangladesh industries through the intermediary of these Managing Agents in those days.<sup>2)</sup> These agents provided, as their name indicates, the management of the majority of private corporations during British and Pakistani period. They acted as an entrepreneur, capitalist, financier and business manager. Thus to a considerable extent they assumed the role

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1) We have in mind the restrictive practices of the zaibatsu system in pre-War Japan and group behavior in post-War Japan.

2) Ahmed, M. Farid, March 1985, op. cit., p. 128.

of investment bankers. Several large agencies extended their activities to include upto thirty corporations, usually in several often unrelated industries. Thus there were business group in Bangladesh like Japan, though on a small scale. Managing agency system does not exist in Bangladesh after liberation but the business group exists in Japan even today in the form of *kigyo-shudan* or *keiretsu*.

In a country like Bangladesh where entrepreneurship and capital are scarce, formation of business group may contribute towards her industrial development. But here the dangerous aspect of business group like the “financial oligarchy” that was created by *zaibatsu* in Japan needs to be taken into consideration.

### Business Group VS. Spreading of Ownership of Stock

It is apparent from earlier discussion that creation of business group has resulted chronic shortage of shares on the market. It is fact that if the business group did not exist, the shares could be exchanged among general public. Consequently, a wider distribution of stockownership would come about.

We have mentioned earlier that since about 70% of project cost comes as loan from different financial institutions, spreading stock ownership among general public is emphasized by the Company Law Reform Commission. While formation of business group through interlocking stockholding favors concentration of stocks among group enterprises, it may adversely affect the securities market because of the resulting discouragement to investment for the potential investors.

Japanese experience shows that the business group through interlocking stockholding is helpful for industrialization, even with smaller equity contribution. So fiscal and other policy measures may be devised for encouraging business group in Bangladesh.

### Formation of Holding Company

It is gathered that some of the industries that have been transferred from nationalized sector to private sector have been laid off or closed due to management's inadequacies. Accordingly, Government has declared a new management framework in the Bangladesh Enterprises (Nationalization) Amendment Ordinance 1987. This is Known as 'holding company management'. Under this system, controlling share of an enterprise (51%) is retained by the Government or the main company and the minority share (49%) is offered to public investors (34%) and to workers (15%). The goal is to associate private shareholders and even the workers with the management of the enterprise. The main company (sector corporation) and the enterprises under them will be converted into holding company and public limited company respectively. This resembles to Japanese system where the capital of subsidiary companies are

partly held by such big companies (parent company) and partly by private shareholders. But in Japan this system is run completely at the private sector whereas in Bangladesh, this has been initiated retaining the control in the public sector. This seems to be logical in view of the inadequacy of private sector management in Bangladesh. It is a general notion that an industrial unit, management of which is shifted to a new hand, may initially face some odds in its odyssey. The old organization may be of assistance in streamlining management. In that sense, retaining the majority of shares in the hands of public sector appears to be reasonable. However, this is the beginning of the ultimate goal, it is expected.

## VI. CONCLUDING OBSERVATION

The objectives of establishing DSE were raising capital and spreading ownership of shares. These two objectives together sounds to be contradictory. If the goal of the market were only to raise capital the market would be geared to the wealthy, who hold most of the capital. If the objective were only to spread ownership the focus of sales efforts would be on the nonwealthy. In Bangladesh, the market and the related Government institutions have had to work toward both objectives, despite their sometimes divergent orientation. Securities markets, therefore, have not become a major force in economic development for the third world.<sup>1)</sup> Critics may characterize attempts to develop securities markets in developing economies as misguided efforts to introduce Western institutions onto entirely different socio-economic system or as a naive, if the mere establishment of a securities market is expected to have a significant effect on the allocation of resources.<sup>2)</sup> Securities markets in the U. S. A. and Western Europe evolved in response to the need for capital generated by the industrial revolution. Securities markets in developing countries, however, have typically sprung less from private economic need than Government decisions to pursue political and economic goals.<sup>3)</sup>

Stock market in Bangladesh is in its infant stage. It does not necessarily have the same problem as that of Japan or does not warrant the same solution of the identical problems. The stages of development, the difference in culture and institutional arrangement or the availability of resources or the extent or context of the problem in Japan and Bangladesh needs to be taken into consideration in applying Japanese experience. However, the study of Japanese market, separated from the Western world by distance, institutional arrangement and culture seems to deepen our insight about the development process and problems of developing

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1) Wai, U, Tun and Patrick High T., "Stock and Bond Issues and Capital Markets In Less Developed Countries," IMF Staff Papers, July. 1973 pp. 253–55.

2) See, Lloyd, "The Role of Capital Markets in Developing Countries", INTERECONOMICS, 96. 1977, p. 102.

3) Wai and Patrick, op. cit., pp. 253, 256.

markets.

Foregoing investigation of Japanese corporate finance ventilates the following important points. Firstly, the suppression of external markets does not necessarily mean the disappearance of their functions. Instead, the location of the allocation function may shift, as it appears to have done in the Japanese case, to internal capital markets within economic groups of firms. Secondly, incentives for high leverage were accompanied in Japan by the development of institutions, such as the main bank relationship, that could accommodate them.

Bangladesh economy is dominated by agricultural activities which are not organized on a corporate basis. Besides, the average size of industrial enterprises is small. For them the market would not be very important, for the high cost of small issues discourages small firms from taking recourse to the new issue market, and for several other reasons as well, the small firms prefer the private to the public limited form. Thus the new issue market can not be as important a part of the greater capital market in a country of predominantly small business and agriculture like Bangladesh. On the investor's side, they are reluctant to invest in risky assets rather prefer risk-free asset. All these suggest that in our context the Japanese internal capital market and main bank system may produce a better result in our industrialization program.

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